

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 March 2005 (10.03.2005)

PCT

(10) International Publication Number
WO 2005/022408 A1

(51) International Patent Classification⁷: **G06F 17/30**

(21) International Application Number:
PCT/GB2004/003583

(22) International Filing Date: 20 August 2004 (20.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0320205.8 28 August 2003 (28.08.2003) GB

(71) Applicant (for all designated States except US): **BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY** [GB/GB]; 81 Newgate Street, London, Greater London EC1A 7AJ (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **LI, Yang** [CN/GB]; 175 Cavendish Street, Ipswich Suffolk IP3 8BG (GB).

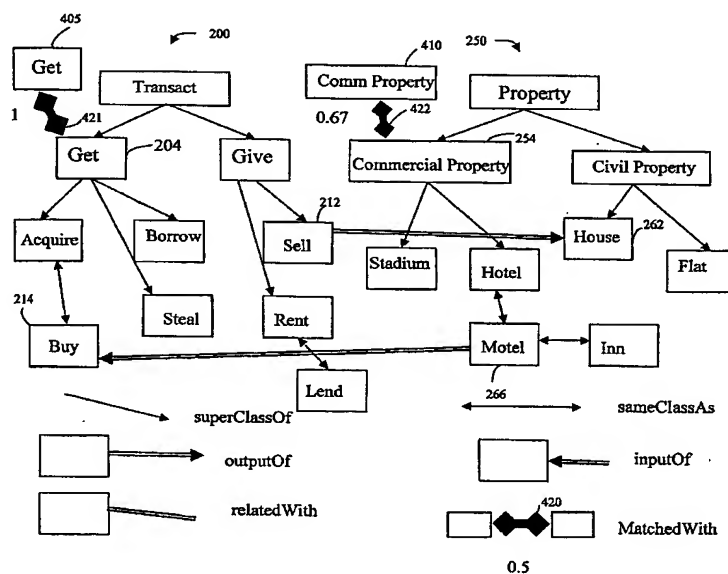
(74) Agent: **WILLIAMSON, Simeon, Paul**; BT Group Legal, Intellectual Property Department, PP: C5A, BT Centre, 81 Newgate Street, London, Greater London EC1A 7AJ (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR STORING AND RETRIEVING DATA USING ONTOLOGIES



(57) Abstract: A method of storing service description documents in a computerised storage system in which each document is associated with at least one verb ontological node (204) and at least one noun ontological node (254), each verb ontological node having one or more links to other verb ontological nodes and each noun ontological node having one or more links to other noun ontological nodes whereby the verb nodes form a verb space (200) and the noun nodes form a noun space (250) and a method of retrieving service description documents from a plurality of service description documents stored in this way comprising the steps of: controlling a user interface to request from a user at least one verb request term (405) and at least one noun request term (410), associating the or each

verb request term (405) with a corresponding verb node (204) and the or each noun request term (410) with a corresponding noun node (254), comparing the or each corresponding verb node (204) with the or each verb node (212, 214) associated with each of the stored service description documents, comparing the or each corresponding noun node (254) with the or each noun node (262, 266) associated with each of the stored service description documents, and selecting for retrieval zero or more of the stored service description documents on the basis of the comparison steps and controlling the user interface to inform the user of the selected documents to enable the user to retrieve one or more of the selected documents.



Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.